

Claims

1. A method of operating a radio-based telecommunications system wherein a common physical channel is used to transmit data on the downlink from a radio base station being controlled by a radio network controller to a mobile user equipment, wherein the data is transmitted in frame slots, each frame representing a combination of transport channels and each slot of the frame having a field for carrying bits of said data and having a field for carrying bits of an indicator, said indicator indicating the combination of said transport channels used in said frame, and said indicator further indicating if no data is to be transmitted in said frame, the method comprising the steps of:
 - setting the transmit indicator power of the indicator bits in dependence from a data power of the data bits if data is transmitted in the frame,
 - or if no data is transmitted in the frame, setting the transmit indicator power of said indicator bits in dependence from a virtual reference power which is calculated from parameters comprising first power values defined by a radio network element, in particular the radio network controller, or comprising second power values representing an average of that transmit powers which have been used to transmit that data within at least two of the preceding frames.

2. A method according to claim 1, wherein each slot of the frame further having a field for carrying bits of a pilot, said pilot being a training sequence for optimizing the reception on said common physical channel, the method further comprising the steps of:
 - if data is transmitted, setting the transmit pilot power of the pilot bits to said data power of the data bits,
 - and if no data is transmitted, setting the transmit pilot power of said pilot bits in dependence from said virtual reference power.
3. A method according to claim 1, wherein the transmit indicator power and/or the transmit pilot power are each adapted to said virtual reference power by adding a respective power offset to said virtual reference power.
4. A method according to claim 3, wherein the transmit indicator power and/or the transmit pilot power are each adapted to said virtual reference power as well as to said transmit data power by adding the same respective power offset.
5. A method according to claim 1, wherein the first power values are predefined maximum power levels which shall not be exceeded on the transport channels.

6. A method according to claim 5, wherein one of the first power values is the paging channel power and wherein at least another one is that maximum forward access channel power which shall not be exceeded on the respective forward access channel.
7. A method according to claim 5, wherein the reference power is calculated by selecting out of said maximum power levels the lowest power level for being used at all or for being used on the transport channels.
8. A method according to claim 5, wherein the reference power is calculated by building from said maximum power levels a mean power level for being used on the transport channels.
9. A device or a set of devices for operating a radio-based telecommunications system wherein a common physical channel is used to transmit data on the downlink from a radio base station being controlled by a radio network controller to a mobile user equipment, wherein the data is transmitted in frame slots, each frame representing a combination of transport channels and each slot of the frame having a field for carrying bits of said data and having a field for carrying bits of an indicator, said indicator indicating the combination of said transport channels used in said frame, and said indicator further indicating if no data is to be transmitted in said frame, the device or set of devices comprising:

- means for setting the transmit indicator power of the indicator bits in dependence from a data power of the data bits if data is transmitted in the frame,
- and means for setting the transmit indicator power of said indicator bits, if no data is transmitted in the frame, in dependence from a virtual reference power which is calculated from parameters comprising first power values defined by a radio network element, in particular by the radio network controller or comprising second power values representing an average of that transmit powers which have been used to transmit that data within at least two of the preceding frames.